

Appl. No. 10/692,613
Amendment dated February 14, 2006
Reply to Office action of December 30, 2005
Attorney Docket K-2043

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-16 (canceled)

17. (currently amended) A rotary cutting tool including a body having a rotational axis and a nominal cutting diameter, comprising:

~~a rotary cutting tool including a body having a rotational axis;~~
a first flute formed in said body and including a first insert-receiving pocket;
a second flute formed in the body and including a second insert-receiving pocket, the second insert-receiving pocket adjacent the first insert-receiving pocket;
a first cutting insert mounted in the first insert-receiving pocket;
a second cutting insert mounted in the second insert-receiving pocket,

~~wherein each cutting insert includes~~ including a first end, a second end, a centerline disposed midway between the first and second ends, a tapered cutting edge spanning between the first end and the second end, a first corner formed at the juncture of the tapered cutting edge and the first end, and a second corner formed at the juncture of the tapered cutting edge and the second end, the cutting edge defined by a first tapered section and a second tapered section, the first tapered section and the second tapered section forming a convex curved configuration of a constant radius defining a highpoint therebetween.

~~wherein the first and second corners of each insert lie within the nominal cutting diameter when the cutting tool is rotated about the rotational axis, and~~

~~wherein a difference in radial dimension as measured from the rotational axis of the cutting tool between the tapered cutting edge at the centerline of the first cutting insert and one of the first and second corners of the second cutting insert define a radial runout compensation dimension that is greater than a predetermined manufacturing tolerance of the rotary cutting tool, thereby minimizing radial runout when the cutting tool is rotated about the rotational axis.~~

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wherein the highpoint of the first cutting insert and the first end of the second cutting insert are substantially circumferentially aligned with each other when the rotary cutting tool is rotated about the rotational axis.

18-23. (canceled)

24. (previously presented) The rotary cutting tool according to Claim 17, wherein the first and second insert-receiving pockets are helically arranged along the length of the body.

25. (previously presented) The rotary cutting tool according to Claim 17, wherein the first and second flutes are helically arranged along the length of the body.

26-45. (canceled)

46. (new) The rotary cutting tool according to Claim 17, wherein a difference in radial dimension as measured from the rotational axis of the cutting tool between the tapered cutting edge at the centerline of the first cutting insert and one of the first and second corners of the second cutting insert define a radial runout compensation dimension that is greater than a predetermined manufacturing tolerance of the rotary cutting tool.

47. (currently amended) The rotary cutting tool according to Claim 46, wherein the predetermined manufacturing tolerance is approximately 0.002 inches, and wherein the radial runout compensation dimension is approximately 0.003 inches.

48. (new) The rotary cutting tool according to Claim 17, wherein the tapered cutting edge of the first cutting insert and the first and second corners of the second cutting insert define a deviation dimension such that a maximum outward radial displacement of the first and second corners of the second insert from the rotational axis is less than a magnitude of a predetermined manufacturing tolerance.

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49. (currently amended) The rotary cutting tool according to Claim 48, wherein the predetermined manufacturing tolerance is approximately 0.002 inches, and wherein the radial runout compensation dimension is approximately 0.003 inches.